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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,360	04/20/2005	Pieter Jan Bolt	310.1047	1574
20311	7590	05/10/2006		
LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016				
			EXAMINER LARSON, LOWELL A	
			ART UNIT 3725	PAPER NUMBER

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,360	<b>Applicant(s)</b> BOLT ET AL.	
	<b>Examiner</b> Lowell A. Larson	<b>Art Unit</b> 3725	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 to 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 to 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/27/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 to 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with alternative and speculative terminology such that one skilled in the art would be unable to determine when infringement would occur.

Examples are "preventing, at least reducing" in line 3 of Claim 1, the use of "or" and "and/or" throughout the claims, and "for instance" in Claim 11.

Furthermore, multiple-dependency Claim 11 improperly depends on a previous multiple-dependency claim.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 to 4 and 7, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen in view of Kergen.

Andersen discloses deep drawing in which the blank holding force (line 65 in Figure 3) is initially set at a low value and is increased corresponding to the advance of

the drawing punch (line 66 in figure 3) according to a predetermined program set in controller 34.

Kergen discloses deep drawing in which the blank holding force is regulated by contactless sensor measurement of the condition of the edge of the work blank or the separation between the blank holder and the die ring in accordance with a predetermined regulation logic. Kergen advises that the holding force can be desirably maintained at a minimum value necessary to prevent the generation of wrinkles while maximizing the reduction ratio. See column 4, line 61, to column 5, line 18.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to control the blank holding force in the deep drawing of Andersen, starting at a low value, with the use of contactless sensing of the condition of the blank edge or the separation of the blank holder and die ring, following the teaching of Kergen, in order to maximize the reduction ratio and avoid wrinkling. Finding the optimum regulation parameters, as recited in Claim 4, is considered to be an obvious exercise of ordinary skill in the deep drawing art for any particular product configuration, and not a patentable distinction absent a disclosure of criticality in the solution of stated problems in the combination of and specific control parameter and drawing condition.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen in view of Kergen as applied to Claim 1 above, and further in view of Cao et al.

These claims require the control parameters to be determined by testing or by simulation. Cao et al. shows that testing and simulation of operating parameters are

well known techniques for quality control to ensure greater parts consistency. See column 4, lines 1 to 13.

It would have been further obvious to one skilled in the art to employ the deep drawing control suggested by Andersen and Kergen in a test or simulation mode, following the suggestion of Cao et al., in order to ensure greater consistency during subsequent production.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 8 to 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kergen.

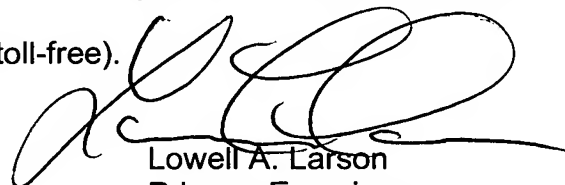
Kergen discloses a deep drawing apparatus including a die ring 2, downholder 3 with positioning means 12, a control 23 and contactless sensors, as required by these claims. The particular manner in which the control is “arranged” to control the positioning means, as recited in Claim 8, is of no consequence since the apparatus is the same regardless of any such arrangement.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lowell A. Larson whose telephone number is (571) 272-4519. The examiner can normally be reached from M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks Derris can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lowell A. Larson  
Primary Examiner  
Art Unit 3725

LAL  
May 5, 2006